## Features:

- 4 SMA electrical interfaces
- Designed to work with COTSWORKS RJ-10G and RJ-5G-C transceivers
- Clampdown feature standard on all boards
- Spring header receptacles for fast and easy transceiver mounting
- Convenient test points for DDMI interface
- Easy to read LED indicators for visual function verification
- Easy access signal detect test points
- Easy access TX Disable D.I.P. switches
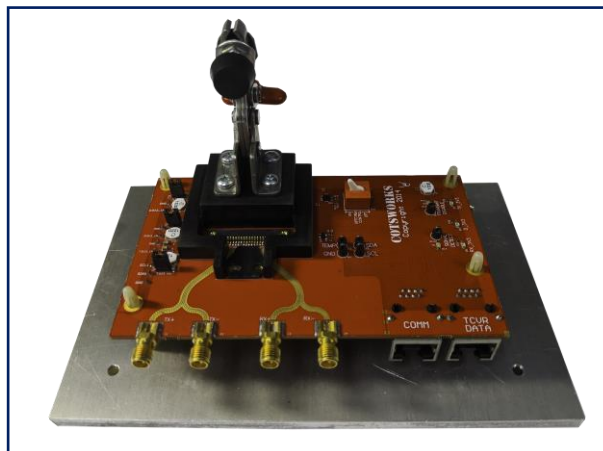
This high performance evaluation board allows for fast and reliable testing without the need for a final board design.

Commercial Aerospace | Military Aerospace | Military Tactical | Industrial Oil & Gas | Military Sensing | Undersea Networking
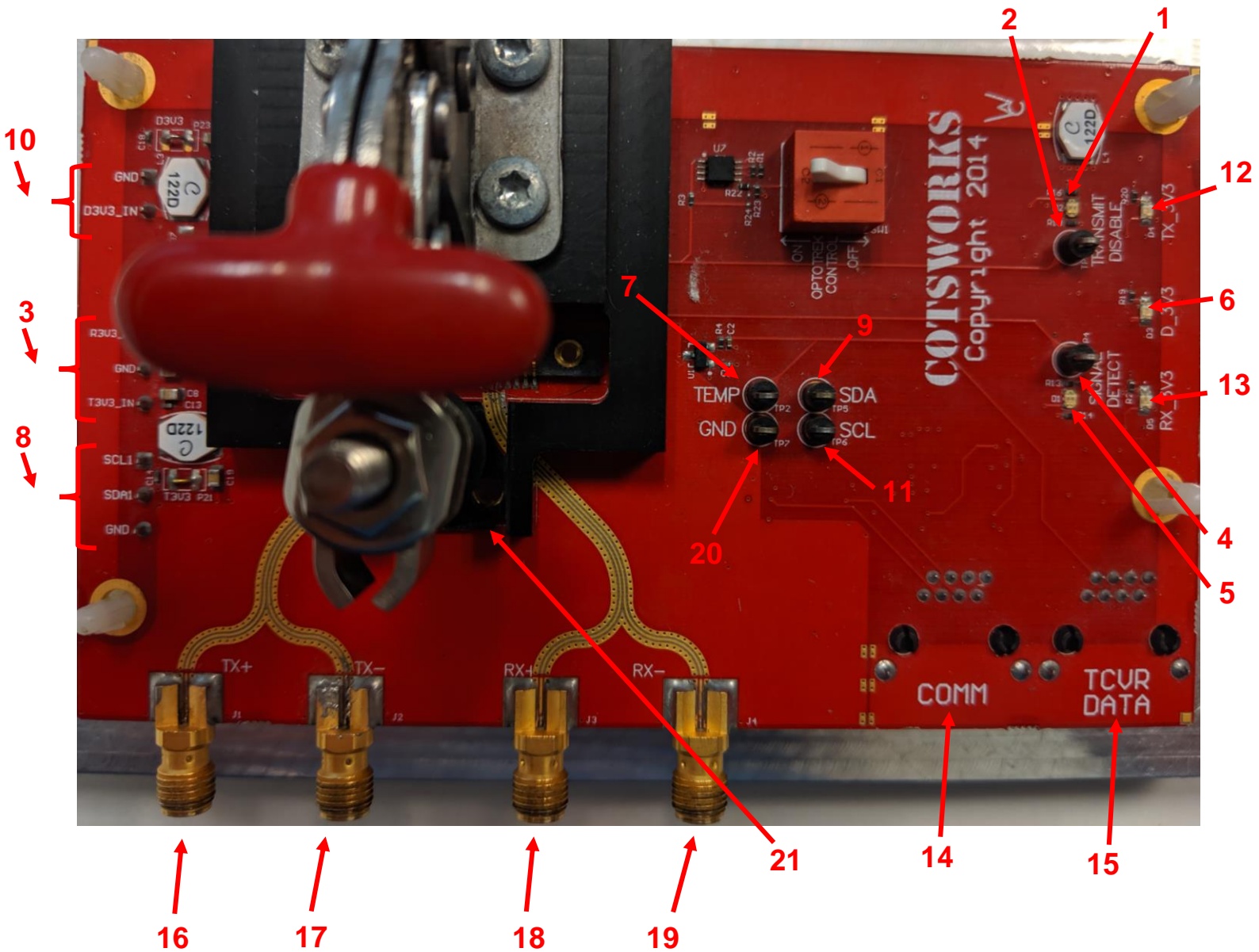
General Description

This electrical interface board is ideal for testing all features of the COTSWORKS RJ-10G and common pinout transceivers.

RJ common pinout transceiver test board is designed to simplify early level testing without having to integrate the transceiver into a host board from pattern generation through electrical connectors

Absolute Maximum Ratings

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	NOTES
Maximum Supply Voltage	V_{CC}	-	3.47	V	
Storage Temperature	T_{sto}	-55	105	ºC	
Operating Temperature	T_{OP}	-55	105	ºC	

1	**TX Disable Indicator**	The LED will turn red if the transmitter is disabled. This means the TX_DIS pin on the DUT is driven to Vcc. The LED will turn green if the transmitter is enabled. This means the TX_DIS pin on the DUT is driven to GND.
2	**TX Disable Test Point**	This test point can be used to measure the voltage on the TX_DIS pin on the DUT. It can also be used to drive the TX_DIS pin on the DUT. If the test point is connected to GND, the Transmitter will be enabled. If the test point is connected to Vcc, the Transmitter will be disabled.
3	**Transceiver Power**	Connect the supplied 4-pin power cable to 3.3V. Transceiver power is used to power the DUT and does not power the components on the eval board.

4	Signal Detect Test Point	This test point can be used to measure the voltage on the SD pin on the DUT. If the voltage is measured high, the receiver of the DUT is receiving a signal. If the voltage is measured low, the receiver of the DUT is not receiving a signal.
5	Signal Detect Indicator	The LED will turn red if the receiver of the DUT is not receiving a signal. The LED will turn green if the receiver of the DUT is receiving a signal. *If testing an RJ-RX2, this Indicator corresponds to channel 1.*
6	Digital Power Indicator	The blue LED will turn on if there is 3.3V on the digital power plane supplied from location 16. Digital power is used to power the components on the eval board and does not power the DUT. *If testing an RJ-RX2, this test point corresponds to channel 2.*
7	Temperature Test Point	This test point can be used to measure the voltage from the temperature sensor on the eval board.
8	I2C Interface	If supported by the DUT, communication through the I2C bus can be established through a 3-pin connector in this location.
9	SDA Test Point	If supported by the DUT, communication through the I2C bus can be established through this test point.
10	Digital Power	Connect the supplied 2-pin power cable to 3.3V. Digital power is used to power the components on the eval board and does not power the DUT.
11	SCL Test Point	If supported by the DUT, communication through the I2C bus can be established through this test point.
12	TX Power Indicator	The blue LED will turn on if there is 3.3V on the TX power plane supplied from location 4. TX power is used to power the TX on the the DUT.
13	RX Power Indicator	The blue LED will turn on if there is 3.3V on the RX power plane supplied from location 4. RX power is used to power the RX on the the DUT.
14	Communication I/O	A standard OTS Ethernet communication cable with an RJ can be used for communication with the DUT and eval board EEPROM through I2C. Contact COTSWORKS for the pinout details.
15	Transceiver I/O	A standard OTS Ethernet communication cable with an RJ can be used for communication with features of the DUT. Contact COTSWORKS for the pinout details.
16	TX- Input	Provide inverted input signal for the optical transmitter through a 50Ω SMA cable. Check DUT datasheet for input signal specifications.
17	TX+ Input	Provide non-inverted input signal for the optical transmitter through a 50Ω SMA cable. Check DUT datasheet for input signal specifications.
18	RX+ Output	Non-inverted output signal from the optical receiver. Connect 50Ω SMA cable.
19	RX- Output	Inverted output signal from the optical receiver. Connect 50Ω SMA cable.
20	Ground Test Point	This test point is connected to circuit ground.
21	DUT connection point	Connection point for RJ DUT. Place screw posts from DUT inside the through holes on securing fixture, place DUT pins on corresponding pins from 20-pin header on test board, and secure in place with plunger for connection.

Ordering Information

TESTBD-RJ-10	-XX
	Plate Option
RJ Transceiver Eval Board Common Pinout	P: Plate Stand Included NP: Plate Stand Not Included

Example part number: TESTBD-RJ-10-P [RJ Transceiver Eval Board Common Pinout with plate stand.]
Contact COTSWORKS for mechanical dimensional information and other configuration options.